

MEASUREMENTS.

Length of body	26.2 mm.
Length of pronotum	6.1 mm.
Greatest caudal width of pronotal disk	5. mm.
Length of tegmen	14.5 mm.
Width of tympanum	6.5 mm.
Length of caudal femur	17.2 mm.

The single specimen taken was collected at night with the aid of a lantern, stridulating loudly on a low green bush. Even when approached it did not cease its stridulation, but kept up a loud and constant zick, zick, zick, zick, much like our eastern *Scudderia* but far louder. Other individuals were heard stridulating loudly during the night until just before dawn.

In endeavoring to capture other specimens during the evening one was located in a high oak tree, another about twelve feet from the ground in a dense bush, another in a tangle of vines near the ground and others, including the specimen captured, in low green bushes on the mountain side. All collecting was done after dark which made it very difficult to locate the specimens, and, although they did not move until approached very closely, they usually ceased their song when disturbed. One which I succeeded in almost grasping escaped by tumbling down into the thick weeds under its perch.

New Scarabaeidae.

BY H. C. FALL.

The present article was primarily designed to make known an interesting new species of *Thyce* discovered by Mr. G. H. Field, of San Diego, in the summer of 1906. The opportunity is taken, however, to add descriptions of two species of *Lachnosterna* and a *Polyphylla* which appear to be without names. The relation of each of these to previously described forms is easily made known, and there is therefore little use in awaiting monographic treatment of their genera of which there is either little need or small prospect in the near future.

Thyce fieldii n. sp.

Of the usual form, head and thorax piceous, elytra blackish brown, legs paler brown, vestiture pale ochreous. Head densely clothed with elongate scales and fine erect hair, prothorax and elytra with rather sparse recumbent acuminate scales, which are as a rule from two and one-half to three times as long as wide; sterna densely clothed with long cinerous or ochreo-cinerous hair, venter densely cinerosquamulose. Clypeus sinuato-truncate (♂) or arcuato-truncate (♀). Prothorax four-fifths as long as wide, sides parallel in basal three-fifths, surface polished and finely rather sparsely punctate, especially toward the middle posteriorly; median line impressed and punctured. Elytra nearly parallel, finely feebly somewhat densely punctate, without costae; suture densely clothed with white scales. Length 22-23½ mm.

Male.—Antennal club subequal in length to entire stem, last joint of maxillary palpi fully three-fourths as long as the antennal club, with a broad, deep, oval excavation throughout its length. Front tibiae entirely devoid of teeth except the apical one. Outer claw of each tarsus with an acute tooth which is about one-third as long as the apical portion of the claw; tooth of inner claw of front tarsus about one-half as long as that of the outer claw; the disparity evident, but less marked on middle and hind feet.

Female.—Brown throughout, a little wider behind, vestiture sparser, clypeus smaller, the angles rounded; head with the vertex obtusely tumid. Antennal club about three-fourths the length of the preceding joints; last joint of maxillary palpus half as long as the antennal club; front tibiae strongly bidentate; tarsi a little shorter; teeth of claws smaller than in the male, but showing nearly same disparity.

Five examples (4 males, 1 female) of this fine species are before me, all collected by Mr. Field, in the southern part of San Diego County, California.

The simple front tibiae of the male, bidentate in the female, and the polished sparsely punctured thorax distinguish this species at once and remarkably from all previously described forms. It is dedicated with pleasure to its discoverer from whom I received one male taken in the summer of 1906, at Campo—elevation 2,400 feet. It was at once recognized as a new species and I wrote Mr. Field urging him to go for them again the following summer, when it was hoped females might be secured. A visit to the same region last July was successful, and Mr. Field has kindly sent me three more males and one female from his catch. Only two or three of

the latter sex were obtained. A short extract from a letter from Mr. Field relative to this trip will be of interest in this connection. He writes:—

“We started (from San Diego) June 29, and a hot spell started the same day we did. The first week was withering, blistering hot and, as we drifted along the Mexican border in the semi desert country, Hell could not have been more than a half mile off, and it wouldn't have surprised me at all to see old Mr. Devil sitting under a sage brush or greasewood. I cut out the Devil's canyon trip on account of the intense heat, and as it was impossible to take the horses any nearer than Mountain Springs, we actually could not have carried water enough to quench our thirst until we got back. I was obliged to make a long hot drive to reach the Thyce tree, but made it, and while supper was cooking I placed the cyanide bottles and nets by the tree to be prepared for an emergency call, but the infernal rascals did not come out till it was all but dark, and then they did come with a rush as they did before. There were not nearly so many out, but after the battle we counted thirteen slain.”

Mr. Field narrates further adventures with the new *Thyce*—but this is sufficient to indicate some of the conditions incident to their capture.

***Polyphylla fuscula* n. sp.**

Most nearly allied to *diffracta* Csy., but smaller and conspicuously darker owing to the sparse vestiture and subobsolete clytral vittæ. Head and entire disk of thorax clothed with erect hairs, these becoming sparser and shorter toward the sides of the latter; thoracic vittæ narrow and imperfect, the scaly vestiture pale yellowish in color throughout, not at all paler in the feebly condensed lines which represent the more or less strongly marked white vittæ of the related species. Antennal club about three-fourths longer than the stem. Pygidium squamulo-pubescent, the hairs and squamules not very densely placed, and both nearly evenly distributed over the entire surface, the lateral and apical margins only slightly reflexed. Front tibiæ bidentate (♂). Length 19-20 mm.

Chiricahua Mountains, Arizona.

Described from three males collected by Mr. V. W. Owen,

of Los Angeles, who has very kindly placed them at my disposal. In one example the elytral vittae are almost entirely wanting, in the others a little better defined. The antennal club is relatively shorter than in any of our previously described species. The shorter spur of the anterior tibia is about three-fourths the length of the longer one, and this seems also about the ratio prevailing in both *diffRACTA* and *crinita* notwithstanding Casey's statements of existing differences.

***Lachnosterna lenta* n. sp.**

Oblong, scarcely wider behind, robust, not strongly convex, castaneous, legs paler. Clypeus feebly emarginate, border rather widely reflexed, surface moderately finely punctate, the punctures well separated; front similarly punctured, more sparsely at middle, in some examples. Thorax obliquely narrowed in front, sides subparallel posteriorly, margin finely crenate, punctuation coarse, close, and nearly evenly distributed. Elytral punctuation as coarse as or slightly coarser than that of the thorax, and equally dense; sutural costa distinct, discal costa faint but evident, marginal obsolete. Pygidium finely sparsely punctate, nearly smooth in the female. Metasternum hairy in both sexes, the hairs shorter and less dense in the female. Abdomen minutely remotely punctate. Last joint of maxillary palpus elongate fusiform, not impressed. Length 17-20 mm., width 10-12 mm.

Male.—Antennal club slightly longer than the entire stem; pygidium broader and evenly convex; abdomen flattened at middle, the penultimate segment with an arcuate or subangulate slightly roughened ridge a little behind the middle; last ventral broadly concave, smooth at apex; inner spur of hind tibia short, one-third to two-fifths the length of the outer one; ungual tooth smaller, acute, distinctly intra-median in position.

Female.—Antennal club shorter than the stem; pygidium smoother, more narrowly rounded and slightly tumid at apex; inner spur of hind tibia nearly as long as the outer; ungual tooth larger, median.

This species is a member of the *ephelida* group and should stand between *generosa* and *praetermissa*. It is closely related to the latter, differing in its rather more robust form, coarser, denser punctuation, somewhat more widely reflexed clypeus, the thoracic margin more evidently crenulate. The genitalia are quite distinct from the figures given by Smith, for *praetermissa*, the male claspers more complex as viewed

laterally. The pubic process in the female is long, slender, and forked at tip. In *praetermissa* the public process of the female is shorter and stouter, much as in Smith's figure for *villifrons*, the tips of the arms with two or three short setæ.

Described from 3 males, 1 female, taken at Mobile, Ala., by Mr. T. P. Loding, and sent me by Mr. Knaus.

***Lachnosterna lobata* n. sp.**

Elongate cylindrical, not or scarcely broader behind, brown, elytra sparsely clothed with short erect hairs, few if any of which exceed in length one-fourth the width of the scutellum, and which are arranged for the most part along the costæ. Clypeus with a moderate cuspidate emargination, the border moderately reflexed, the surface together with that of the front densely but not coarsely punctate, the latter smoother along the clypeal suture. Prothorax nearly twice as wide as long, widest and rather strongly rounded at middle, sides a little sinuate both anteriorly and posteriorly, front angles acute, hind angles rectangular or very nearly so as viewed from above; margin not at all uneven, base and apex with marginal lines, side margins rather wider than usual; punctuation rather fine and not very close, the punctures as a rule distant by from one to two times their own diameter, somewhat sparser at middle; on each side an arcuate row of three foveiform impressions, of which the anterior within the front angles is largest and best defined, the posterior one nearer the base than the side, small and sometimes absent. Elytral costæ moderate, punctuation similar to that of the thorax but more vaguely impressed; pygidium rather coarsely rugose; metasternum finely densely punctulate and moderately densely hairy; free angle of hind coxal plate produced outwardly in form of a rounded lobe, which is visible from a dorsal view point. Abdomen very finely sparsely punctate, the fifth and posterior half of the fourth segment rather densely punctate; spurs of hind tibiæ slender, arcuate, free; claws with an acute median tooth. Length 17-18 mm., width $6\frac{3}{4}$ -7 mm.

Male.—Antennal club subequal in length to joints 2-7; abdomen vaguely narrowly impressed along the middle, penultimate segment with a transverse impression posteriorly which is feeble at middle; last segment slightly flattened; pygidium broadly convex.

Female.—Antennal club as long as joints 3-7, abdomen convex, pygidium broadly transversely impressed subapically.

Chiricahua Mts., Arizona.

I am indebted to Mr. Schwarz for the four examples (1 male, 3 females) from which the above description is drawn. The species is a very distinct one and does not resemble at

all closely any previously described species of *Lachnosterna* with which I am acquainted. It possesses the characters which in Horn's synopsis define the *crenulata* group and may be placed at the end of that series, differing from all of them, and indeed from all known species of the genus in its prominent front thoracic angles, and in the form of the hind coxal plates. The terminal joint of the maxillary palpi may be best described as cylindro-ovate, differing more or less from all other species of the group, though nearest *aemula*; it is feebly impressed in the male, scarcely at all so in the female.

In the paper on *Listrochelus* by Dr. Horn,* the prolonged and acute free angle of the hind coxal plate is said to be a constant character in this genus, while in *Lachnosterna*, the angle is sometimes right, but never acute or prolonged. This is a mistake. Compare for instance *antennata*, *nitidula* and *tristis* of *Lachnosterna* with *disparilis*, *flavipennis* and *carminator* of *Listrochelus*, and the coxal angle will be found to be quite as prominent or even more so in the *Lachnosternas*. This structure then is no more distinctive than is the vertical carina or the ungual pectination, and there remains no single constant character for the separation of the two genera.

Notes on Sesiidae.

BY HENRY ENGEL.

Sesia bassiformis Walker.

During the summer of 1905, the Messrs. Kahl and Klages collected a number of specimens of this species at Ohio Pyle, Pa. Previous to these captures my only record of *bassiformis* from this section was a specimen given me by Mr. Knechtel.

The Ohio Pyle specimens were taken in a field where Iron Weed grew in abundance, either resting on the leaves of these plants or flying about in the field. This note furnished a clue to locate this species in my collecting grounds about Pitts-

*Trans. Am. Ent. Soc. VII, 1878, p. 138.